



ENERGY

Purpose

The County seeks to provide a framework for moving toward an energy future that transitions from traditional, non-renewable fossil fuel energy sources, to the production of environmentally sustainable, renewable energy supplies that do not degrade ecosystems.

Introduction

The production, transportation, cost, and use of energy affects us all. Energy issues have a profound effect on ecosystems, global climate, commerce, the provision of public services, land use planning, and development, transportation, and quality of life. Using energy more efficiently will benefit residents and businesses economically and reduce environmental impacts. Changes in land use patterns, transportation systems, building designs, agricultural practices, human behavior, and recycling efforts can all lead to greater energy production, efficiency, and conservation.

San Luis Obispo County has abundant resources that can be and are used to generate energy. These include a mix of renewable and non-renewable sources: crude oil and gas, biomass fuels, geothermal, wind, tidal, wave, solar energy, and micro-hydroelectric potential. Crude oil and gas are exported out of the county for refining and distribution. Only a small portion of the wind, solar, and biomass potential in the county is currently used. The development of local resources may offer the best alternatives to importing large amounts of energy from other areas of the state.

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

—Report of the World Commission on Environment and Development: [Our Common Future](#) (also known as the [Brundtland Commission](#) or *Brundtland Report*)



The 2030 Challenge

In January of 2006, Architecture 2030 officially issued the ‘2030 Challenge’, calling for 1) all new buildings and developments to be designed to use half the fossil fuel energy they would typically consume, i.e., half the regional or country average for that building type, 2) at a minimum, an equal amount of existing building area be renovated annually to use half the amount of fossil fuel energy they are currently consuming, and 3) the fossil fuel reduction standard for all new buildings be increased to 60% in 2010, 70% in 2015, 80% in 2020, 90% in 2025 and carbon neutral by 2030 (using no fossil fuel GHG-emitting energy). Fossil fuel reduction targets should be achieved through design, the application of renewable energy technologies, and/or the purchase of renewable energy (20% maximum).

Because most local public institutions, residences, industries, businesses, farms, and ranches are not currently maximizing direct use of local energy resources, the county relies heavily on imported resources. Imported resources include diesel, gasoline, propane, natural gas, and electricity. The production and distribution of energy can cause significant negative impacts to the natural environment. Energy generated from fossil fuels (i.e., natural gas, coal, and oil) is a significant contributor to greenhouse gas (GHG) emissions. Reducing energy use and increasing use of renewable energy sources can therefore directly benefit the environment.

Reducing energy use can also benefit the economy. For example, by saving energy through more efficient construction and operation of commercial and industrial facilities, businesses will have lower operating costs and a greater potential to increase capital and profits. The potential for savings is considerable because such facilities may use large amounts of energy for manufacturing processes, space heating or cooling, refrigeration, and lighting.

Both the public and private sectors need to reduce energy use and increase use of local renewable energy sources. Local governments can improve energy conservation and efficiency through land use planning policies local regulations, and more efficient management of the transportation system and public buildings and facilities. Local governments can also encourage energy-efficient agricultural practices, building regulation, energy education, and recycling and reuse programs.

RENEWABLE ENERGY USE

Renewable energy sources capture energy from on-going natural processes such as sunshine, wind, tidal, wave, flowing water, biological processes, and geothermal heat. In contrast, nuclear power and fossil fuels, such as coal, oil, and natural gas are non renewable. Renewable forms of energy, other than geothermal and tidal power, ultimately come from the sun. Biomass, for example, is accumulated over a period of months, as with straw, or through many years, as with wood.



Renewable energy resources may be used directly or used to create other more convenient forms of energy. Examples of direct use are passive buildings, solar ovens, geothermal heating, and water-wheels, micro-hydro, and windmills. Examples of indirect use that require energy harvesting are electricity generation through wind turbines or photovoltaic cells, or production of fuels such as ethanol from biomass.

SUSTAINABLE BUILDING PRACTICES – GREEN BUILDINGS

Buildings account for nearly half of the total energy used in the United States. They represent a significant portion of the nation's consumption of energy and raw materials and waste output. Sustainable building practices include designing, constructing, and operating buildings and landscapes to incorporate on-site energy production, energy efficiency, water conservation, waste minimization, pollution prevention, resource-efficient materials, and high standards of indoor environmental quality. "Green" building design involves investments in energy and resource-efficient materials and technology. Benefits include:

- Efficient use of water, energy, lumber, and other resources, which also minimizes maintenance and operation costs to homeowners and businesses.
- Designs that are appropriately suited for the site and climate.
- Pollution prevention and reduced waste.
- Potential health benefits from reduced exposure to noxious materials.

Understanding the consequences associated with energy waste, and changing our behavior to use less energy and rely on local and/or renewable energy sources, will result in many benefits, such as:

- ensuring a sustainable energy supply,
- reducing greenhouse gas emissions,

Energy conservation
means reducing energy waste, such as turning lights, heating, and motors off when not needed.

Energy efficiency is
doing the same or more work with less energy, such as replacing incandescent light bulbs with compact fluorescent light bulbs or buying an Energy Star appliance to use less energy for the same or greater output.



We will recognize success when...

- *Energy consumption in County buildings and facilities is reduced by 20% by 2020.*
 - *Green building practices are used in all new development and remodels.*
- *A program is in place to retrofit existing buildings using green building practices.*
 - *Waste reduction, reuse and recycling program is in effect to divert 70% of waste in unincorporated areas by 2015.*
 - *A variety of environmentally sound renewable energy systems are in operation, including solar power and wind energy systems and cogeneration facilities, with a combination of commercial systems and distributed energy resources.*
- *Energy consumption is reduced through conservation and efficiency measures, development of environmentally sound renewable energy sources, and location of most new housing in compact urban neighborhoods near jobs, services and transportation.*

- reducing significant impacts to sensitive biological and natural resources from nonrenewable and resource-consumptive energy sources; and
- securing a vibrant economic future that relies on sustainable energy resources.

Relationship to Other Elements, Plans, and Programs

This chapter contains specific energy policies; however, all chapters of the Conservation and Open Space Element and all elements of the General Plan must work together to form a cohesive set of goals and policies that manage and sustain the county's resources for generations to come. The County's Guiding Principles for Strategic Growth address the interconnection of land use, resource conservation, and quality of life. The Land Use Element's Framework for Planning (Inland and Coastal) reflects the County's desired Strategic Growth principles and goals. The following energy goals, policies, and implementation strategies are compatible and consistent with the Strategic Growth principles and provide specific direction to achieve and maintain the county's desired energy resources. Other chapters of this Element also include goals, policies, and implementation strategies that will directly and indirectly affect energy, notably those included in the Air Quality and Water Resources chapters.

Major Issues

The following major issues are derived from the 1995 Energy Element and the changes in state law since that time. The major issues described in that Element are still applicable, and include energy conservation and efficiency, sustainable energy supplies, renewable energy sources, and green building.

- 1) Energy conservation and efficiency means using energy more wisely. There are many opportunities to do so, including developing compact land use patterns, also known as "Strategic Growth," discouraging reliance on auto travel, and encouraging more walkable places and better public transit. Other ways to use energy more



efficiently include constructing more energy-efficient and passive solar-powered homes and businesses, ensuring that County operations are as energy-efficient as possible, and expanding recycling and reuse programs.

- 2) A sustainable energy supply will include greater reliance on renewable energy sources such as solar and wind power. County operations are specifically targeted to pursue environmentally sustainable local energy supplies.
- 3) An increase in the use of renewable energy resources will require some revisions to County ordinances and policies. The revisions will seek to facilitate the use of renewable energy such as wind, solar, geothermal and cogeneration.
- 4) In 2006, electricity and natural gas consumption by residential, commercial, and industrial uses in the unincorporated areas of the county contributed 24% of total community-wide greenhouse gas emissions. Green building seeks to improve building practices to make them more sustainable by conserving water; providing most of their own heating, cooling, ventilation, and daytime lighting; minimizing waste; preventing pollution; and improving indoor air quality.

Goals, Policies, and Implementation Strategies

The intent of the following goals, policies, and implementation strategies is to identify energy needs, conserve and use energy efficiently, use renewable energy, and achieve energy-efficient development. The County recognizes that efficient use of energy and greater reliance on clean, renewable energy benefits the health of our residents, visitors and environment, and contributes to the county's and the region's economic vitality.



TABLE E-1
ENERGY GOALS

Goal E 1	The County will have an environmentally sustainable supply of energy for all county residents.
Goal E 2	Energy consumption at County facilities will be reduced by 20% from 2006 levels by 2020.
Goal E 3	Energy efficiency and conservation will be promoted in both new and existing development.
Goal E 4	Green building practices will be integrated into all development.
Goal E 5	Waste reduction, reuse, and recycling will achieve as close to zero waste as possible.
Goal E 6	The use of renewable energy resources will be increased.
Goal E 7	Design, siting, and operation of non-renewable energy facilities will be environmentally appropriate.

GOAL

1

THE COUNTY WILL HAVE AN ENVIRONMENTALLY SUSTAINABLE SUPPLY OF ENERGY FOR ALL COUNTY RESIDENTS.

Policy E 1.1 Meeting energy needs

Meet our electricity needs through the following prioritized measures:

- a. Increased conservation and efficiency in all sectors of energy use.
- b. Development and use of locally appropriate sources of renewable resources from both distributed and large-scale projects. Examples include wind, tidal, wave, solar, micro-hydroelectric, biomass, and geothermal.
- c. Development of non-renewable sources of energy.



Policy E 1.2 Local control

Assert more local control of energy decisions and sources.

◇ **Implementation Strategy E 1.2.1 Evaluate Community Choice Aggregation**

Determine if Community Choice Aggregation (CCA) or a similar program is a cost-effective and low-risk strategy to increase use of renewable energy, and realize a low-carbon, local energy portfolio. Evaluate CCA for the ability to

- develop local energy resources that can feasibly supply heat and electricity to the county;
- determine the financial framework that provides the lowest cost funding for this portfolio;
- take actions necessary to provide access to the funding; and
- create public-private partnerships to construct, operate and maintain the new energy resources as public works projects

◇ **Implementation Strategy E 1.2.2 Update the Countywide Emergency Energy Contingency Plan**

Update the existing Countywide Emergency Energy Contingency Plan to meet peak electricity and natural gas needs of essential facilities within the county at all times. The plan should evaluate and determine essential energy priorities and establish a strategy for meeting these priorities during periods of energy shortage.

◇ **Implementation Strategy E 1.2.3 Use of tax assessments to retrofit residential and commercial properties**

Consider implementation of an “[AB 811](#)” or municipal financing program that would enable the County to use tax assessment districts and provide low-interest loans to property owners for the installation of energy efficiency improvements and renewable energy sources that are permanently fixed to existing real property within the county. Develop the program as directed by AB 811.

Community Choice

Aggregation: Assembly Bill 117 permits municipalities to aggregate and provide electricity to residents, businesses, and public facilities. Investor-owned utilities (IOUs) continue to own and operate the transmission and distribution system, and provide metering, billing, and other customer service functions.

[AB 811](#) authorizes all cities and counties in California to designate areas within which willing property owners could enter into contractual assessments to finance the installation of distributed renewable generation or energy efficiency improvements, that are permanently fixed to the property owner's existing residential, commercial, industrial, or other real property. These financing arrangements allow property owners to finance renewable generation and energy efficiency improvements through low-interest loans that would be repaid as an item on the property owner's property tax bill.



Renewable energy is energy from sources that regenerate and are generally less damaging to the environment, such as solar, wind, biomass, and small-scale hydroelectric power.

◇ **Implementation Strategy 1.2.4 Renewables Portfolio Standard**

Assess local renewable energy resources and establish a countywide goal for renewable energy sources in conjunction with other counties. The goal will take maximum advantage of available renewable energy resources.

Policy E 1.3 Renewable energy and County facilities

Seek to use renewable energy to power County facilities.

◇ **Implementation Strategy E 1.3.1 Use of renewable energy at County facilities**

Retrofit existing County facilities with appropriate renewable energy and clean technologies such as L.E.D. lighting, solar, wind, biofuel, cogeneration, and fuel cells.,.

◇ **Implementation Strategy E 1.3.2 Fund renewable energy at County facilities**

Seek tax-free, low-interest loans, and other available financial options or grants to fund renewable energy projects.

◇ **Implementation Strategy E 1.3.3 Assess County's use of renewable energy sources and set a target**

Within 12 months of adoption of this Element, identify the County's use of renewable sources for energy use using 2006 as the baseline year and set a target for use of renewable and clean distributed generation sources by 2020.

◇ **Implementation Strategy E 1.3.4 Renewable Energy and Clean Distributed Generation Plan**

Upon identification of a baseline and target for the County's use of renewable sources for energy use in County facilities, develop a plan to achieve the 2020 target.

Policy E 1.4 Methane

Increase the use of methane as an energy source from wastewater treatment plants and active and inactive, closed landfills.

◇ **Implementation Strategy E 1.4.1 Capture methane from landfills and wastewater treatment facilities**

Encourage landfill and wastewater treatment operators to capture and use methane for energy production where



feasible. Land use permit applications for landfill expansions, new wastewater treatment facilities, and amendments to previous permits shall propose the capture and use of methane for energy production where feasible.

Policy E 1.5 Waste burning

Encourage waste-burning biomass facilities and conversion technologies as methods of producing electrical energy without endangering resource recovery programs where environmental and air quality are protected and the facility is compatible with adjoining uses.

GOAL

2

ENERGY CONSUMPTION AT COUNTY FACILITIES SHALL BE REDUCED BY 20% FROM 2006 LEVELS BY 2020.

Policy E 2.1 Energy efficiency

Become a model of energy efficiency and conservation in the provision of services and the maintenance of County facilities and equipment to:

- a. demonstrate to County residents and businesses the benefits of energy efficiency and conservation,
- b. reduce costs of government,
- c. reduce dependence on imported fossil fuel energy, and
- d. improve air quality.

◇ ***Implementation Strategy E 2.1.1 Apply Energy Use Policy to all County facilities***

Amend the Energy Use Policy for County buildings and facilities operated, managed, or leased by General Services to apply to all buildings and facilities operated by the County. The amended Energy Use Policy should identify energy conservation, energy efficiency, demand reduction, distributed generation, and renewable energy strategies consistent with this Element.

Life cycle costing (LCC)
is the process of evaluating the total overall costs and benefits of buildings or equipment over time, including initial costs of design and construction; operating costs; long-term costs of maintenance, repair and replacement; and other environmental or social costs over its full life, rather than simply based on purchase cost alone.



- ◇ **Implementation Strategy E 2.1.2 Use of Life Cycle Costing**
Budget for capital improvements using life cycle costing (LCC) to identify long-term energy costs, environmental benefits, and cost savings for the life of projects.

- ◇ **Implementation Strategy E 2.1.3 Energy efficiency in project management**
Revise project management (PM) processes to incorporate energy efficiency and emissions reductions on all viable projects.

Policy E 2.2 Energy consumption

Decrease energy consumption at all County facilities by 20% using 2006 as a baseline year.

- ◇ **Implementation Strategy E 2.2.1 Monitor and report energy use**

The Departments of General Services, Public Works, Social Services, Library Services, Fire, and Sheriff shall continue, or immediately implement, annual monitoring and reporting of energy use in County buildings and facilities to the Department of Planning and Building.

- ◇ **Implementation Strategy E 2.2.2 Implement energy efficiency activities and improvements**

The Department of General Services will:

- a. Continue to audit existing County facilities to identify potential energy efficiency improvements.
- b. Implement cost-effective energy-efficient design and technology enhancements in existing buildings based on the energy audits.
- c. Allocate funding and staff time annually for energy efficiency upgrades for existing County facilities.
- d. Budget for energy-efficient technology in all new County facilities.
- e. Seek funding to incorporate renewable energy and energy-efficient technology in County facilities.
- f. Turn off the lights in County buildings at night.



Policy E 2.3 Energy and water

Promote water conservation for all water users in the county to reduce the amount of energy used to pump and treat water and wastewater at public water and wastewater treatment and distribution facilities.

◇ ***Implementation Strategy E 2.3.1 Amend Annual Resource Summary Report: Water Conservation***

Include water conservation as a measure in the Annual Resource Summary report of the Resource Management System. Convene collaborative groups of water purveyors in major groundwater basins (e.g., the Nipomo Mesa Water Conservation Area and the Paso Robles Groundwater Basin) to discuss and resolve issues of concern, such as uniform water conservation measures in all local jurisdictions and small water systems.

GOAL**3**

**ENERGY EFFICIENCY AND
CONSERVATION WILL BE PROMOTED IN
BOTH NEW AND EXISTING
DEVELOPMENT.**

Policy E 3.1 Use of renewable energy

Ensure that new and existing development incorporates renewable energy sources such as solar, passive building, wind, and thermal energy. Reduce reliance on non-sustainable energy sources to the extent possible using available technology and sustainable design techniques, materials, and resources.

◇ ***Implementation Strategy E 3.1.1 Incorporate renewable energy systems in new and existing development***

Where feasible, incorporate on-site renewable energy systems (i.e., solar or wind powered) in new and existing development. Collaborate with stakeholder groups, including business and property owners, wineries, and other agricultural operations to increase awareness of renewable systems, to streamline the permitting process, and to identify incentives.

ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy. The agencies work closely with more than 1,000 manufacturers to determine the energy performance levels that must be met for a product to earn the ENERGY STAR label. The Agencies only award the label in product categories where the efficient products offer the features and performance consumers want and provide a reasonable payback if the initial purchase price is higher. In addition, ENERGY STAR labels are also available for homes and businesses.



Policy E 3.2 Energy efficient equipment

Require the use of energy-efficient equipment in all new development, including but not limited to Energy Star appliances, high-energy efficiency equipment, heat recovery equipment, and building energy management systems.

◇ ***Implementation Strategy E 3.2.1 Develop energy efficiency program for new development***

As part of a Green Building Program, develop an energy efficiency program for new development, retrofits, and renovations.

◇ ***Implementation Strategy E 3.2.2 Energy Efficiency Retrofit Program***

Develop and adopt an Energy Efficiency Retrofit Program to increase energy efficiency in existing commercial, residential, governmental, and industrial facilities. As part of the program, collaborate with the incorporated cities in the county to develop and implement a countywide Energy Audit Upon Sale requirement that would require sellers to provide interested buyers with evidence of a certified energy audit at the time of sale.

Policy E 3.3 Use of renewable energy for water and wastewater

Promote the use of renewable energy systems to pump and treat water and wastewater.

◇ ***Implementation Strategy E 3.3.1 Evaluate installation of renewable energy systems at water facilities***

The San Luis Obispo County Flood Control and Water Conservation District and the Water Resources Advisory Committee shall investigate the feasibility of installing renewable energy systems at water facilities that pump and treat water and wastewater.

Policy E 3.4 Incentives for energy conservation

Offer incentives to conserve energy.



Example of sustainable landscaping



◇ **Implementation Strategy E 3.4.1 Voluntary energy efficiency and conservation**

Encourage and assist voluntary actions by owners of existing commercial and residential buildings for energy efficiency retrofits, such as the installation of solar panels, wind turbines, green roofs, cool roofs, natural lighting, and other long-term, permanent energy conservation installations.

◇ **Implementation Strategy E 3.4.2 Amend ordinances: energy conservation**

Amend ordinances, plans, and procedures as feasible to create incentives and standards that reduce energy consumption.

◇ **Implementation Strategy E 3.4.3 Encourage energy and water efficiency improvements**

Encourage homeowners, landlords, and tenants to install energy- and water-efficient fixtures and equipment and drought-tolerant landscaping.

◇ **Implementation Strategy E 3.4.4 Energy efficiency and conservation education: public**

Seek grants and partnerships to sponsor energy education programs to increase public awareness about the benefits of energy conservation, energy efficiency, and recycling.

◇ **Implementation Strategy E 3.4.5 Energy efficiency and conservation training and education: County staff**

Provide training and support to County staff regarding renewable energy, energy conservation, and efficient technology.

Policy E 3.5 Demonstration projects

Provide community demonstration or pilot projects to educate the community about the effectiveness of renewable energy.

◇ **Implementation Strategy E 3.5.1 Collaborate to provide demonstration projects**

Work with PG&E, CalPoly, and other organizations or businesses as appropriate to sponsor demonstration projects for community solar photovoltaic power, wind energy, and LED lights for roads and parking lots.



Residential solar panels

What is a “green” building?

*A **Sustainable or “green” building** is a holistic approach to design, construction, and demolition that minimizes the building’s impact on the environment, the occupants, and the community. - CCR, Title 24, and Part 11, Ch. 2*

Average Savings for a Green Building

30% energy savings

35% carbon savings

30-50% water savings

50-90% waste cost savings. - U.S. Green Building Council/Capital E



Policy E 3.6 Energy conservation in agriculture

Promote state-of-the-art energy conservation and efficiency in agriculture.

◇ ***Implementation Strategy E 3.6.1 Sponsor energy education to agriculture community***

Seek grants and partnerships to sponsor energy education programs to increase awareness in the agricultural community about the benefits of energy conservation, energy efficiency, and waste reduction.

GOAL**4****GREEN BUILDING PRACTICES WILL BE INTEGRATED INTO ALL DEVELOPMENT.*****Policy E 4.1 Integrate green building practices***

Integrate green building practices into the design, construction, management, renovation, operations, and demolition of buildings, including publicly funded affordable housing projects, through the development review and building permitting process.

◇ ***Implementation Strategy E 4.1.1 Continue partnerships for green building education***

Continue to educate staff and the public about green building through partnerships with local nonprofit organizations (SLO Green Build), professional planning, and building organizations (USGBC C4), and local agencies.

◇ ***Implementation Strategy E 4.1.2 Develop Green Building Program***

Develop a mandatory Green Building Program in collaboration with stakeholders that includes performance standards, guidelines, review criteria, incentives, and implementation schedules based on building type, size, and location. Amend existing ordinances as necessary to implement the Green Building Program using the California Green Building Code as a minimum standard. Perform an annual review of the Green Building Program for consistency with state requirements and amend as necessary.



Natural lighting



◇ **Implementation Strategy E 4.1.3 Use of Green Building Checklists**

Prior to adoption and implementation of a Green Building Program, require applications for the following projects to include a green building checklist (LEED, Build It Green, or Green Builder, among others) in their development applications: 1) nonresidential projects with 5,000 or more square feet of gross floor area; 2) residential projects with 3,000 or more square feet of gross floor area or more than four dwelling units (applies to multi-family, mixed-use, planned development, or subdivision projects); and 3) land divisions or other residential projects of 5 or more dwelling units. Use checklists to determine consistency with this Element and to inform environmental impact analyses where applicable.

◇ **Implementation Strategy E 4.1.4 Collaborate to develop uniform Green Building Codes**

Work with local governments, nonprofit organizations, special districts, and other public organizations to develop uniform green building policies and programs.

◇ **Implementation Strategy E 4.1.5 Encourage green affordable housing**

Encourage the implementation of green affordable housing practices by developing partnerships between developers, nonprofit organizations, and local jurisdictions. If possible, seek additional funding programs in support of green development practices (such as the Enterprise Green Communities program).

Policy E 4.2 Green building incentives

Offer incentives to encourage green building practices in all development projects, including retrofits of existing buildings.

◇ **Implementation Strategy E 4.2.1 Remove disincentives to green building**

Collaborate with stakeholders to remove regulatory or procedural disincentives to implement green building practices, and identify incentives to encourage green building practices.

The California Building Standards Commission adopted the [California Green Building Standards Code](#) on July 17, 2008, as amended for publication in the 2007 California Green Building Standards Code, CCR, Title 24, and Part 11. Its purpose is to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: 1. Planning and design; 2. Energy efficiency; 3. Water efficiency and conservation; 4. Material conservation and resource efficiency; and 5. Environmental air quality. The Code sets minimum Green Building Standards that may, at the discretion of any local government entity, be applied.



Urban Heat Island

The term "heat island" describes built up areas that are hotter than nearby rural areas. On a hot, sunny summer day, roof and pavement surface temperatures can be 50–90°F (27–50°C) hotter than the air, while shaded or moist surfaces remain close to air temperatures. These surface urban heat islands, particularly during the summer, have multiple impacts and contribute to atmospheric urban heat islands. Heat islands can affect communities by increasing summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, heat-related illness and mortality, and water quality.

-USEPA 2008

◇ ***Implementation Strategy E 4.2.2 Provide expedited permitting for green building projects***

Implement an expedited or "fast track" permitting process for green projects in all County departments that review development applications.

Policy E 4.3 Green County facilities

Incorporate green building practices into the planning, design, construction, management, renovation, operations, and demolition of all County buildings.

◇ ***Implementation Strategy E 4.3.1 Prepare a Green Building Checklist for County facilities***

Prepare a green building checklist of an established green building certification program such as LEED, Build It Green, Green Builder, or as otherwise directed by the County's Green Building Program. Achieve a score that would allow at least the baseline certification level of a rating system, for example, LEED Silver for the LEED rating system.

◇ ***Implementation Strategy E 4.3.2 Apply Green Building Operations and Maintenance to all County operations***

Develop green building operations and maintenance guidelines for all County operations and maintenance practices undertaken by the County or its contractors. The guidelines shall, include, at a minimum, use of:

- Recycled-content, formaldehyde-free fiberglass insulation
- Cellulose insulation, or other natural insulation products
- No- or low-Volatile Organic Compounds (VOC), formaldehyde-free paints, stains, and adhesives
- No- or low -VOC, furniture, particleboard, and cabinetry
- Exposed concrete as a finished floor.

◇ ***Implementation Strategy E 4.3.3 Support Green Building Accreditation for County staff***

Offer green building training and support green building professional accreditation for County capital project managers, architects, building plans examiners, building inspectors, building officials, planners, and other staff as applicable in the



Departments of Planning and Building, General Services, and Public Works.

Policy E 4.4 Solar exposure

Orient new buildings to maximize solar resources, shading, ventilation, and lighting.

◇ ***Implementation Strategy E 4.4.1 Amend ordinances and plans to maximize solar resources***

Amend design plans, guidelines, and other documents to promote the following design techniques to maximize solar resources:

- a. Passive solar design, thermal mass, and insulation to reduce space heating and cooling needs;
- b. Shading on east, west, and south windows with overhangs, awnings, or deciduous trees; and
- c. Sustainable site design and landscaping to create comfortable microclimates.

◇ ***Implementation Strategy E 4.4.2 Amend ordinances and plans to mitigate urban heat island effect***

Amend design plans and guidelines to encourage projects in urban areas to avoid or mitigate the urban heat island effect. Design techniques include:

- a. Minimizing use of dark materials on roofs, parking lots, and roads.
- b. Maximizing vegetation, particularly shade trees, to cool air temperatures.
- c. Reducing the area of large surface parking lots.
- d. Using light-colored aggregate in new road construction and repaving projects adjacent to existing cities and in some of the communities north of the Cuesta Grade. (E 27.1)

Policy E 4.5 Healthy indoor environments

Encourage healthy indoor environmental quality in new and renovated buildings, including publicly funded affordable housing projects and County buildings, using healthy building materials, finishes, paints, and products.

"California is blessed with vast resources...we rededicate ourselves to making California cleaner, greener and more prosperous. The green building approach builds in conservation from the ground up...It's good for business and it's great for the environment."

-Gov. Arnold Schwarzenegger



*San Luis Obispo County's diversion rate in 2006 was 63%. A **diversion rate** is the percentage of its total waste that a jurisdiction diverts from disposal at a landfill through reduction, reuse, recycling and composting programs. The State of California requires jurisdictions to achieve a minimum 50% diversion rate. - [CA Integrated Waste Management Board](#)*

◇ **Implementation Strategy E 4.5.1 Amend ordinances to encourage healthy building materials**

Amend design plans and building ordinances to encourage the use of the following materials, products, and techniques:

- Recycled-content, formaldehyde-free fiberglass insulation, cellulose insulation, or other natural insulation products
- No- or low-Volatile Organic Compounds (VOC), formaldehyde-free paints, stains, and adhesives
- No- or low -VOC, furniture, particleboard, and cabinetry
- Use of exposed concrete as a finished floor
- Appropriate low-E windows, when possible
- Natural, recycled-content, and low-VOC carpet
- Natural light.

GOAL

5

RECYCLING, WASTE DIVERSION, AND REUSE PROGRAMS WILL ACHIEVE AS CLOSE TO ZERO WASTE AS POSSIBLE.

Policy E 5.1 Source reduction and waste diversion

Encourage source reduction and diversion of solid waste generated to as near zero waste as possible, in order to reduce energy consumption.

◇ **Implementation Strategy E 5.1.1 Achieve Waste Diversion Rate**

Create a waste reduction, reuse, and recycling program aimed at achieving a diversion rate of at least 70% by 2015 for the unincorporated county.

◇ **Implementation Strategy E 5.1.2 Promote business that promote source reduction**

Support and promote ongoing efforts of the business community, schools and universities, and nonprofit organizations to promote green business practices and products that are locally sourced and/or to reduce, reuse, or recycle materials.



◇ **Implementation Strategy E 5.1.3 Accommodate recycling containers in trash enclosures**

Develop new standards to accommodate recycling containers in trash enclosures. At a minimum, enclosures should accommodate two four-yard containers.

Policy E 5.2 County operations and waste

Continue efforts to reduce waste from County operations through reduction, reuse, and recycling in all County programs, operations, facilities, and buildings.

◇ **Implementation Strategy E 5.2.1 Adopt an Environmentally Preferable Purchasing Policy**

Develop and implement an Environmentally Preferable Purchasing (EPP) policy to purchase recycled content and toxic-free products for County supplies, equipment and services, and to promote recycling markets.

◇ **Implementation Strategy E 5.2.2 Ensure recycling at all County facilities**

Ensure that recyclable materials are collected at all County facilities, and develop a policy for the salvage and reuse/recycling of County equipment at the end of its useful life in order to ensure that it is responsibly disposed of or recycled.

Policy E 5.3 Biomass and composting

Encourage biomass, green waste, and food waste composting facilities (agricultural, residential, food service, commercial, industrial sources) for the proper disposal of locally generated waste in locations where land use conflicts can be minimized. (Refer to **Policy AGP 13**)

◇ **Implementation Strategy E 5.3.1 Countywide food waste composting**

Work with the Integrated Waste Management Authority (IWMA), CalPoly, the school districts, and other state and local agencies to develop a Countywide Food Waste Composting Program for businesses, schools, and residents.



Solar Panels

Man shapes himself through decisions that shape his environment.

—Rene Dubos

Environmentally Preferable Purchasing

(EPP) is the procurement of goods and services that have a reduced impact on human health and the environment as compared to other goods and services serving the same purpose.



Policy E 5.4 Construction and demolition waste

Continue to reduce construction and demolition waste in accordance with the County's Construction and Demolition Debris Recycling Ordinance. Support increased diversion rates over time.

Policy E 5.5 Sustainable materials in County buildings

Reuse building materials, use materials with recycled content, or use materials that are derived from sustainable, renewable, and/or local sources to the greatest extent feasible in County buildings. In proposed County projects, encourage construction that:

- a. Minimizes building materials with high-embodied energy (e.g., cement, metal)
- b. Uses fly ash in concrete. Provide incentives and consider regulations requiring new building projects that use a substantial amount of concrete to incorporate at least 25% fly ash to offset some of the energy use and greenhouse gas emissions associated with the manufacturing of cement
- c. Uses sustainable materials for pipes
- d. Uses spacing, sizes, and modular dimensions that minimize lumber use and optimize performance
- e. Uses recycled aggregate in concrete
- f. Uses straw bale construction in exterior walls.



GOAL

6

THE USE OF LOCAL RENEWABLE ENERGY RESOURCES WILL BE MAXIMIZED AS PART OF AN OVERALL ENERGY PORTFOLIO.***Policy E 6.1 Sustainable energy sources***

Promote the development of sustainable energy sources and renewable energy projects through streamlined planning and development rules, codes, processing, and other incentives.

◇ ***Implementation Strategy E 6.1.1 Eliminate obstacles to renewable energy use in the County***

Revise County policies and regulations as needed by the end of 2010 to eliminate barriers to or unreasonable restrictions on the use of renewable energy.

Policy E 6.2 Commercial solar and wind power and other renewable energy systems

Encourage and support the development of solar and wind power and other renewable energy systems as commercial energy enterprises.

◇ ***Implementation Strategy E 6.2.1 Review of large solar projects***

Evaluate large-scale commercial solar projects (i.e. over 10 MW) to favor technologies that maximize the facility's power production and minimize the physical effects of the project. Physical effects include, but are not limited to, noise, area of land disturbance and water use.

◇ ***Implementation Strategy E 6.2.2 Encourage development of wind power facilities***

Encourage the development of wind power in areas where wind speeds make commercial wind power feasible. Focus should be placed on locations near existing power facilities and existing transmission lines.



Distributed energy resources (DER) are small, modular, energy generation and storage technologies that provide electric capacity or energy located where it's needed.

DER's typically produce less than 10 megawatts (MW) of power and include wind turbines, photovoltaics (PV), fuel cells, microturbines, reciprocating engines, combustion turbines, cogeneration, and energy storage systems. DER systems may be either connected to the local electric power grid or isolated from the grid in stand-alone applications.

– U.S. Department of Energy

◇ **Implementation Strategy E 6.2.3 Use of disturbed sites**

Examine the potential for use of previously disturbed sites such as former mine sites, or disturbed urban areas such as parking lots.

◇ **Implementation Strategy E 6.2.4 Use of existing energy-generating sites**

Collaborate with local and State agencies and energy facility operators to develop renewable energy resources at existing energy generating sites.

Policy E 6.3 Small-scale renewable energy resources

Develop renewable energy resources in the county, including the safe, effective, and efficient use of small wind energy systems, solar power systems, passive solar buildings, and other renewable energy systems designed for onsite home, farm, and commercial use.

Policy E 6.4 Solar electric power facilities

Use solar electric power generating facilities, especially in areas remote from utility services and in places where such systems can meet specialized power needs cost effectively.

Policy E 6.5 Geothermal resources

Use geothermal hot water for heating spas, greenhouses, or other beneficial applications that appropriately dispose of waste.

◇ **Implementation Strategy E 6.5.1 Existing energy facility sites**

Collaborate with operators of existing energy facilities to study the potential for geothermal development.

Policy E 6.6 Distributed energy

Encourage distributed energy resources to increase the efficiency of the power and transmission system and use of local renewable fuel sources.

Policy E 6.7 Cogeneration facilities

Encourage cogeneration facilities as a method of reducing overall energy use.



◇ **Implementation Strategy E 6.7.1 Cogeneration facility guidelines**

In cases where a cogeneration facility does not meet the criteria for an exemption from an environmental determination review the project both for environmental and fiscal impacts of development consistent with the following guidelines:

- a. Cogeneration facilities should be built and operated in conjunction with existing facilities whenever possible.
- b. The risk of public exposure to hazardous materials should be minimized by using the least hazardous materials feasible, engineering safety systems, and state-of-the-art safety management practices.
- c. The cogeneration project will not change performance standards regarding air pollution, noise, traffic, or other possible nuisances to nearby property owners.
- d. The proposed facility shall comply with emission standards for harmful air pollutants, as determined by the San Luis Obispo Air Pollution Control District and the California Energy Commission, when appropriate.
- e. The applicant shall demonstrate that sufficient buffers exist to protect the housing units on adjacent properties from all hazards.

Policy E 6.8 Renewable Energy Resources

Designate and protect areas that contain renewable energy resources such as wind, solar, geothermal, and small hydroelectric.

◇ **Implementation Strategy E 6.8.1 Mapping of resources**

Use state, federal, or other available data to map areas that contain renewable energy resources.

◇ **Implementation Strategy E 6.8.2 Renewable energy combining designation**

Amend the Framework for Planning, the Area Plans, and the Land Use Ordinance (LUO) by establishing and applying a Renewable Energy (RE) combining designation based on the mapping in Energy Implementation Strategy 6.8.1. The RE designation and implementing LUO standards are to:

Renewable Energy facilities include but are not limited to the following renewable energy projects: solar power generating facilities, waste-burning biomass facilities, wind energy development, and hydroelectric facilities.



- a. Encourage the development of renewable energy while maintaining a high level of environmental quality;
- b. Avoid areas that are not appropriate for renewable energy due to existing incompatible uses; and
- c. Protect areas of renewable energy resources, as well as existing and expanding renewable energy projects, from encroachment by incompatible land use categories and development.

Policy E 6.9 Commercial Renewable Energy Facility Siting

Renewable energy is developed most effectively where sufficient renewable energy resources exist (e.g., solar energy requires a certain amount of sunlight to be efficient and wind energy requires a certain amount of wind.) In areas where renewable energy resources have been identified and mapped pursuant to Policy E 6.8, renewable energy development is dependent on the mapped resource and shall be given high priority while balancing the protection of other environmental resources.

GOAL

7

**DESIGN, SITING, AND OPERATION OF
NON-RENEWABLE ENERGY FACILITIES
WILL BE ENVIRONMENTALLY
APPROPRIATE.**

Non-Renewable Energy:
*energy from sources that
use a non-renewable
natural resource such as
uranium or fossil fuels
such as coal, or natural
gas.*

Fossil fuel facilities
*include, but are not limited
to oil and gas wells,
separators, and refineries.*

Policy E 7.1 Non-Renewable Energy Facility Siting

Energy, fossil fuel, and related facilities will be sited, constructed, and operated in a manner to protect the public from potential hazards and significant environmental impacts.

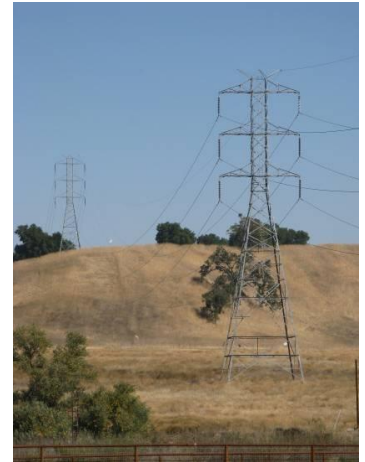
Implementation Strategy E 7.1.1 Non-Renewable Energy facility design, siting, and operation standards

Amend the Land Use Ordinance and the Coastal Zone Land Use Ordinance as needed in order to accomplish the following objectives and codify the following requirements. Until the County adopts the ordinance amendments, use the following objectives and requirements to guide the review of development projects.



General

- 1) Proposed new and major additions to energy and fossil fuel facilities will provide a sufficient buffer zone from existing or proposed human populations, with special consideration given to those who cannot be quickly evacuated to safety, such as the disabled and elderly. To establish a buffer zone, a comprehensive risk analysis should be completed.
- 2) Underground all existing electrical distribution lines on the project site up to the transformer, to the point of onsite use, or to the point of interconnection to the utility. California Public Utilities Commission standards should be considered during the review process.
- 3) Continue to maintain, operate, monitor, and repair the facility so that it does not constitute a public safety hazard or an environmental threat.
- 4) Employ the best reasonably achievable techniques available to prohibit disruption of environmentally sensitive areas such as wetlands, animal or bird refuges, or habitat of species of special concern. Avoid impacts to habitat of rare, threatened, or endangered species.
- 5) Locate new or expanded facilities outside sensitive view corridors, scenic, or recreational areas.
- 6) If the proposed location visually impacts views of the site from public roads or lands, prepare a screening plan to minimize visual impacts.
- 7) All exterior lighting shall be energy efficient and shielded to not extend beyond the site.
- 8) Avoid or otherwise fully mitigate impacts to significant archeological, paleontological, agricultural, or historic resource sites.
- 9) Locate proposed facilities in geologically stable areas.
- 10) Require that all existing facilities and activities are in compliance with all previous permit conditions and all applicable laws prior to authorizing any new expansion.



Transmission lines in the rural area



- 11) Facilities shall not degrade surface or groundwater resources.

Electric and magnetic fields

- 12) Consider electric and magnetic fields (EMF) in planning for expansion, siting, and construction of future electric facilities. Apply EMF standards established by the California Energy Commission and the California Public Utilities Commission.
- 13) Monitor research and policy developments concerning electric and magnetic fields. If exposure standards are established in the future by state and federal agencies, consider including them in applicable ordinances.

Consolidation of energy facilities

- 14) Require consolidation of energy facilities in any expansion or modification project to the maximum extent technically, environmentally, and economically feasible. Require concurrent processing of the proposed facilities when appropriate to avoid or reduce project and cumulative impacts.
- 15) When new sites are needed for industrial or energy-related development, expansion of facilities on existing sites (or on land adjacent to existing sites) will take priority over new, undeveloped sites. Exceptions will only be allowed when it can be shown that:
- a. Existing and adjacent locations are infeasible and the environmental impacts of opening up a new site are less than the impacts of expansion on or adjacent to existing sites.
 - b. To do otherwise would adversely affect the public welfare.
 - c. Adverse environmental impacts are mitigated to the maximum extent feasible.
- 16) Construction and/or expansion of new energy, fossil fuel, or industrial processing facilities at consolidated sites will be considered only if proposed facilities are not redundant. Operators and owners of such sites shall make their



facilities and property available for commingled processing and consolidation of oil and gas facilities on an equitable and non-discriminatory basis.

Extended reach facilities

- 17) An application for a land use permit for a project including onshore extended reach facilities for the purpose of exploring or developing offshore oil or gas resources may be approved only after a specific plan, as described in government code section 65450 et seq., for overall development of the parcel has been approved.
- 18) If extended reach facilities are proposed, surface disturbance should be minimized by consolidating the drilling facilities and using existing pipeline rights-of-way, where feasible, fully before new sites are considered.

Toxic and hazardous releases

- 19) The County's emergency response plan and Office of Emergency Services should be consulted prior to operation of a new energy facility. Local fire departments should also be contacted.
- 20) Reduce the risk of hazardous material releases at power producing facilities consistent with requirements of California Health and Safety Code sections 25500 through 25553. Methods of risk reduction should include (1) use of non-hazardous or less hazardous material, (2) use of engineered safety systems, and (3) use of administrative controls.
- 21) State and federally approved oil spill contingency and countermeasure plans for proposed facilities shall be submitted to the County prior to the start-up of operations. These plans shall demonstrate, at a minimum that adequate containment exists to contain 110% of each tank's contents, unless otherwise required by applicable state and federal regulations.
- 22) In the event of a petroleum or hydrocarbon release, the County will implement the following:



Morro Bay Power Plant



- a. Emergency response and initial cleanup of the spill site shall be completed as soon as possible. An emergency permit shall be granted as appropriate. A state of emergency as defined in the General Plan must exist for a permit to be granted.
 - b. Environmental impacts caused by response and cleanup activities shall be minimized. Environmental monitor(s) shall be onsite to reduce possible impacts.
 - c. A post-spill environmental assessment of the site shall be performed to evaluate and quantify the damage to resources.
 - d. Remediation and restoration of the site to pre-spill conditions shall be completed by the responsible party. These activities are subject to the land use permit/environmental review process.
 - e. If the site cannot be restored to its pre-spill condition, the responsible party shall contribute to an environmental enhancement fund to be used for on- or offsite mitigation projects.
- 23) Encourage existing and proposed energy facilities to prevent oil, gas, and other toxic releases into the environment by: (1) taking measures to prevent releases and spills, (2) preparing for responding to a spill or release, and (3) providing for the protection of sensitive resources. A review of facilities spill response plans or reports from other agencies should be completed to monitor compliance.

Pipelines

- 24) Require new pipeline corridors to consolidate within existing pipeline or electrical transmission corridors to the maximum extent technically and environmentally feasible.
- 25) If new pipelines are necessary, encourage common carrier or multiple-user pipeline construction and use.



Transmission lines

- 26) Discourage land uses that may expose human populations to undue risk of human exposure to potential hazards of large transmission lines.
- 27) Discretionary development and proposed land divisions should follow the standards established by the California Energy Commission and Public Utilities Commission for electric and magnetic field (EMF) exposure.
- 28) Evaluate proposals for new transmission lines for alternatives that significantly reduce their visibility and impacts to sensitive environmental resources.
- 29) As part of the siting analysis, proposals for new transmission line corridors should consider the following preferences to minimize impacts:
 - a. First preference shall be for projects that upgrade or modify existing lines to meet increased demand. In such instances, the existing right-of-way should be maintained at its present width wherever possible.
 - b. Second preference is for corridor consolidation with existing transmission lines, unless there are cumulative impacts that outweigh the benefits of consolidation. In such instances, the amount of additional right-of-way width to be acquired should be kept to the minimum area feasible for operation of the lines.
 - c. The least preferred option is for transmission line projects that require entirely new corridors. In this instance, consideration shall first be given to using existing utility rights-of-way, including pipelines, railroads, and communication cables.
- 30) Existing access roads should be used wherever possible to avoid unnecessary disturbance of vegetation. If new roads are constructed, existing contours should be followed to minimize ground disturbance. New roads shall be constructed in a way that minimizes vegetation removal. A restoration plan shall be included as part of the application to restore the area to pre-construction conditions as much as possible. Guidelines or equivalent alternatives should



be considered by the review authority for all transmission lines.

Policy E 7.2 Facility Upgrades and Replacements

Encourage the upgrade or replacement of existing, older facilities to current safety and environmental standards where appropriate, support the decommissioning and redevelopment of existing, older facilities where current safety and environmental standards cannot be met and existing energy production could be replaced with renewable energy sources. Further, develop a cooperative working relationship with the utility and oil and gas industry, including workshops to provide information about the permitting process.

◇ ***Implementation Strategy E 7.2.1 Inventory existing facilities***

Develop an inventory of all existing facilities including size, age, condition of the facility, current monitoring programs, and use of hazardous materials.

◇ ***Implementation Strategy E 7.2.2 Lifespan and upgrade analysis***

Include a projected lifespan and analysis of upgrade versus decommissioning for each facility.

Policy E 7.3 Safety Coordination

The County will coordinate with state and federal agencies to promote an information exchange about safety standards and regulations with regard to electricity and fossil fuel facilities.

◇ ***Implementation Strategy E 7.3.1 Establish a safety committee***

Establish a safety review committee consisting of qualified individuals from industry, public interest groups, local, state, and federal agencies for proposed major energy projects. The purpose of the group is to review all safety-related issues associated with the operation of the facility and to coordinate responses from enforcement and review agencies as well as the public.



Policy E 7.4 National Repository for Nuclear Waste

Carefully monitor the federal government's progress in establishing a national repository for high-level nuclear waste and the state's efforts for low-level nuclear waste disposal. The County should advocate the safest methods of transportation and storage of nuclear waste.

◇ ***Implementation Strategy E 7.4.1 Reports on status of national repository***

The County should annually request a report on the status of the government's progress in establishing a national repository for highly radioactive waste. The County should collaborate with the California Energy Commission (CEC), the state legislature, and the Attorney General's office to provide local input into the decision into the siting of longer-term and/or permanent disposal sites.

Summary of Implementation Strategies

For each implementation strategy described in this chapter, the following table (**Table E-2**) summarizes the County department or other agency that has primary responsibility for carrying out that strategy. In addition, the table summarizes the priority, estimated year of initiation, and potential source of funding of each strategy. The actual timeframe for implementing the strategies is dependent upon the availability of adequate staff and funding.

TABLE E-2
ENERGY IMPLEMENTATION

Implementation Strategies	Responsible Department or Agency¹	Priority	Timeframe to Start	Possible Funding Sources²
IS E 1.2.1 Evaluate Community Choice Aggregation	APCD, PB, GS	Medium	2011	N/A
IS E 1.2.2 Develop a Countywide Emergency Energy Contingency Plan	OES, PB, PW	Medium	2012	GF
IS E 1.2.3 Use of tax assessments to retrofit residential and commercial properties	PB	High	2011	TBD



TABLE E-2
ENERGY IMPLEMENTATION

Implementation Strategies	Responsible Department or Agency ¹	Priority	Timeframe to Start	Possible Funding Sources ²
IS E 1.2.4 Renewable Portfolio Standard	PB	High	2011	DB
IS E 1.3.1 Use of renewable energy at County facilities	GS, all departments	High	2011	GF, DB, Grants
IS E 1.3.3 Assess County's use of renewable energy sources and set a target	PB, GS	High	2011	DB
IS E 1.3.4 Renewable Energy and Clean Distributed Generation Plan	PB, GS	High	2011	DB
IS E 1.4.1 Capture methane from landfills and wastewater treatment facilities	PB, PW	Medium	2012	N/A
IS E 2.1.1 Apply Energy Use Policy to all County facilities	GS	High	2011	DB
IS E 2.1.2 Use of Life Cycle Costing	GS, PW	High	2010	N/A
IS E 2.1.3 Energy efficiency in project management	GS	Medium	2011	N/A
IS E 2.2.1 Monitor and report energy use	GS, PW, SS, LIB, Fire	High	Immediately ³	DB
IS E 2.2.2 Implement energy efficiency activities and improvements	GS	High	Immediately ³	DB
IS E 2.3.1 Amend Annual Resource Summary Report: Water Conservation	PB	High	2010	DB
IS E 3.1.1 Incorporate renewable energy systems in new development	PB	High	Immediately	N/A
IS E 3.1.2 Encourage renewable energy in new development	PB	High	2010	DB
IS E 3.2.1 Develop energy efficiency program for new development	PB	Medium	2011	DB
IS E 3.2.2 Energy Efficiency Retrofit Program	PB	Medium	2011	DB



**TABLE E-2
ENERGY IMPLEMENTATION**

Implementation Strategies	Responsible Department or Agency ¹	Priority	Timeframe to Start	Possible Funding Sources ²
IS E 3.3.1 Evaluate installation of renewable energy systems at water facilities	PW	Medium	2011	DB
IS E 3.4.1 Voluntary energy efficiency and conservation	PB	Medium	2010	N/A
IS E 3.4.2 Amend ordinances: energy conservation incentives	PB	Medium	2012	DB
IS E 3.4.3 Encourage energy and water efficiency improvements	PB	Medium	2010	N/A
IS E 3.4.4 Energy efficiency and conservation education: public	PB	Medium	2010	N/A
IS E 3.4.5 Energy efficiency and conservation training and education: County staff	Administration	Medium	2011	DB/Grants
IS E 3.5.1 Collaborate to provide demonstration projects	PB, PW	Low	2012	DB, grant
IS E 3.6.1 Sponsor energy education to agriculture community	AG, ALAB	High	2010	DB
IS E 4.1.1 Continue partnerships for green building education	PB	Medium	Immediately ³	DB
IS E 4.1.2 Develop Green Building Program	PB	High	2011	DB
IS E 4.1.3 Use of Green Building Checklists	PB	High	Immediately	N/A
IS E 4.1.4 Collaborate to develop uniform Green Building Codes	PB	Medium	2011	DB
IS E 4.1.5 Encourage green affordable housing	PB	Medium	2013	DB
IS E 4.2.1 Remove disincentives to green building	PB	High	2010	DB
IS E 4.2.2 Provide expedited permitting for green building projects	PB	High	2010	DB
IS E 4.3.1 Prepare a Green Building Checklist for County facilities	PB	High	2010	DB



TABLE E-2
ENERGY IMPLEMENTATION

Implementation Strategies	Responsible Department or Agency ¹	Priority	Timeframe to Start	Possible Funding Sources ²
IS E 4.3.2 Apply Green Building Operations and Maintenance to all County operations	GS, PW, PB	Medium	2012	DB
IS E 4.3.3 Support Green Building Accreditation for County staff	PB, GS, PW	Medium	2012	DB
IS E 4.4.1 Amend ordinances and plans to maximize solar resources	PB	Medium	2012	DB
IS E 4.4.2 Amend ordinances and plans to mitigate urban heat island effect	PB, PW	Medium	2012	DB
IS E 4.5.1 Amend ordinances to encourage healthy building materials	PB	Medium	2012	DB
IS E 5.1.1 Achieve Waste Diversion Rate	PW	High	2010	DB
IS E 5.1.2 Promote business that promote source reduction	PB	Medium	2011	N/A
IS E 5.1.3 Accommodate recycling containers in trash enclosures	PB, PW	Medium	2012	DB
IS E 5.2.1 Adopt an Environmentally Preferable Purchasing Policy	GS	Medium	2012	DB
IS E 5.2.2 Ensure recycling at all County facilities	GS	High	2010	DB
IS E 5.3.1 Countywide food waste composting	PB	Medium	2012	DB
IS E 6.1.1 Eliminate obstacles to renewable energy use in the County	PB	High	2010	DB
IS E 6.2.1 Review of large solar projects	PB	High	Immediately	DB
IS E 6.2.2 Encourage development of wind power facilities	PB	High	Immediately ³	DB
IS E 6.2.3 Use of disturbed sites	PB	High	Immediately ³	DB
IS E 6.2.4 Use of existing energy-generating sites	PB	High	Immediately ³	DB



**TABLE E-2
ENERGY IMPLEMENTATION**

Implementation Strategies	Responsible Department or Agency ¹	Priority	Timeframe to Start	Possible Funding Sources ²
IS E 6.7.1 Cogeneration facility guidelines	PB	Medium	Immediately	N/A
IS E 6.8.1 Mapping of resources	PB	High	2010	DB, grants
IS E 6.8.2 Renewable energy combining designation	PB	High	2010	DB, grants
IS E 7.1.1 Energy facility design, siting, and operation standards	PB, PW	Medium	2012	N/A
IS E 7.2.1 Inventory existing fossil fuel facilities	PB	Medium	Immediately	N/A
IS E 7.2.2 Lifespan and upgrade analysis	PB	Medium	2010	DB
IS E 7.3.1 Establish a safety committee	PB, OES, Fire	Medium	Immediately	N/A
IS E 7.4.1 Reports on status of national repository	PB	High	2010	DB, grants

Notes:

1 Department abbreviations:

Administration = County Administrative Office
 AG = County Agriculture Department
 ALAB = Agricultural Liaison Board
 APCD = SLO Air Pollution Control District
 Cities = Incorporated cities
 Fire = County Fire Department/CAL FIRE
 GS = County General Services Agency
 LIB = County Library
 OES = County Office of Emergency Services
 PB = County Department of Planning and Building
 PW = County Department of Public Works
 RTA = San Luis Obispo Regional Transit Agency
 SS = County Department of Social Services

2 Funding source abbreviations:

GF = General Fund
 DB = Planning and Building Department Budget

3 Denotes an ongoing activity.

Source: Department of Planning and Building, 2009.

